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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,843	12/28/2000	Malcolm M. Smith	062891.0441	1027

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EXAMINER

PIZARRO, RICARDO M

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/752,843

Applicant(s)

SMITH, MALCOLM M.

Examiner

Ricardo Pizarro

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/28/00.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,9-11,17-19,25-27 and 33-35 is/are rejected.
- 7) ☒ Claim(s) 4-8,12-16,20-24,28-32 and 36-40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

In page 8 line 3, page 11 lines 19 and 21 "roam manger" needs to be replaced with -roam manager-.

In page 13 lines 7 and 9 "40" needs to be replaced with -44-

Appropriate correction is required.

Claim Objections

2. Claims 6-7, 9-16, 17-24, 25-32 and 40 are objected to because of the following informalities and it is suggested to applicant:

In claim 6 line 5 replace "link" with -links-.

In claim 7 line 2 replace "link" with -links-, in line 3 replace "a" with -said-.

In claim 9 line 2 insert "wireless" before -network-, in line 8 insert "network" before -interface-.

In claim 14 insert "said" before -communications-

In claim 16 delete the first occurrence of "the".

In claim 17 insert "a" before -multicast-.

In claim 25 line insert "a" before -multicast-, delete "comprising", in line 6 replace "a" with -the-.

In claim 32 line 3 delete "the" in line 4 replace "the" with -a-.

In claim 40 line 4 delete the first occurrence of "the" replace the second occurrence of "the" with
-a-.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fong in
view of Shaughnessy

US patent No. 6,493,328 (Fong et al) discloses an active set management in cellular wireless network, that supports high data rate transmissions, comprising: a mobile unit operable to monitor signals received from a plurality of base transceiver stations (mobile unit 12 will monitor signals from base stations, col 10 lines 17-20) to choose one of the base transceiver stations based on the signals, and to request communications from a chosen base transceiver station (MS requests that the active serving base station be altered in favor of a new serving base station based on quality of transmission, col 10 lines 24-28); a gateway operable to receive a packet addressed to the mobile unit (Base station controller 516 in the wireless network of Fig.

5, Controller 1102 in Fig. 11, packetized data intended for mobile station is received at controller, col 2 lines 38-40), said controller capable of processing protocol conversion (col 13 lines 3-5) and send that packet to a packet network (to network 302 in Fig. 5); base transceiver stations (BTS 502A and BTS 502B in Fig. 5), each base transceiver station operable to receive a packet from the packet network (each BTS capable of receiving packetized data) , the chosen base transceiver station operable to communicate information from the packet to the mobile unit (any of the active Base stations may be selected to transmit the packetized data to the mobile station, col 2 lines 42-44, col 16 lines 14-20), as in claim 1; wherein the signals monitored by the mobile unit comprise pilot signals transmitted by the base transceiver stations (MS monitors interference ratio of pilot signals, col 10 line 19) , as in claim 2; wherein the mobile unit and the base transceiver stations implement High Data Rate wireless communications protocols (col 2 lines 13-21), as in claim 3.

A base transceiver station (BTS 902 in Fig. 9) comprising: a wireless network interface operable to receive a packet from a packet network (a network infrastructure interface card 924 couples the BTS 902 to the wireless network infrastructure, col 11 lines 49-51) wherein the base transceiver station is a member of a group (active set -group- of serving BTS, col 11 line 17) ; a processor operable to determine whether the mobile unit has chosen the base transceiver station for communications (the ASMI/D-RLP 916 are downloaded to the processor 904 and/or the DRAM 906 as ASMI/D-RLP 914 for execution by the processor 904, col 11 lines 64-67. col 12 line 1 , upon execution of the ASMI/D-RLP 914 the BTS 902 performs operations according to the present invention previously described with reference to FIGS. 1-8, col 12 lines 9-12, including selection of BTS by MS, col 10 lines 24-28) and the wireless interface operable to

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communicate information from the packet to the mobile unit if the mobile unit has selected the base transceiver station for communications (MS requests that the active serving base station be altered -selected- in favor of a new serving base station based on quality of transmission, col 10 lines 24-28), as in claim 9; wherein the wireless interface is further operable to transmit a pilot signal for reception by the mobile unit (MS monitors strength of pilot signal transmitted by BTS , col 10 lines 17-18) as in claim 10; wherein the wireless interface communicates using High Data Rate (HDR) wireless communications protocols(col 2 lines 13-21) , as in claim 11.

Fong did not specifically disclose said mobile unit being identified by the BS by a multicast packet, as in claims 1 and 9.

US patent No. 6,141,347 (Shaughnessy et al) discloses Wireless communication system incorporating multicast addressing and method for use, discloses a mobile unit being identified by the BS by a multicast packet, as in claim 9 (Site device in Fig. 4, site device 208 in Fig. 2 that maintains mappings 225 of group identifications to corresponding multicast address, col 4 lines 23-27), as in claims 1 and 9.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to provide the address conversion system as disclosed by Shaughnessy to the High Data rate wireless system disclosed by Fong with the motivation of obtaining a wireless communication system that will support high data rate forward link transmissions capable of supporting non-interrupted transmissions.

4. Claims 17-19, 25-25 and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fong

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US patent No. 6,493,328 (Fong et al) discloses an active set management in cellular wireless network, that supports high data rate transmissions, comprising: a method for processing a packet comprising: determining whether a mobile unit has requested to receive communications from a base transceiver station (MS requests that the active serving base station be altered in favor of a new serving base station based on quality of transmission, col 10 lines 24-28), wherein the base transceiver station is a member of a group associated with the mobile unit (active set –group- of serving BTS, col 11 line 17) ; receiving a packet and if the mobile unit has requested to receive communications, communicating information from the packet to the mobile unit (col 2 lines 17-21), as in claim 17 ; further comprising transmitting a pilot signal from the base transceiver station for reception by the mobile unit (MS monitors strength of pilot signal transmitted by BTS , col 10 lines 17-18), as in claim 18; wherein the base transceiver station and the mobile unit implement High Data Rate (HDR) wireless communications protocols (col 2 lines 13-21), as in claim 19.

Software for processing multicast packet operable to: determine whether a mobile unit has requested to receive communications from a base transceiver station (MS requests that the active serving base station be altered in favor of a new serving base station based on quality of transmission, col 10 lines 24-28), wherein the base transceiver station is a member of a group associated with the mobile unit (active set –group- of serving BTS, col 11 line 17); receive a packet for the multicast group; and if the mobile unit has requested to receive communications, communicating information from the packet to the mobile unit (col 2 lines 17-21), as in claim 25; further operable to transmit a pilot signal from the base transceiver station for reception by the mobile unit (MS monitors strength of pilot signal transmitted by BTS , col 10 lines 17-18),

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as in claim 26; wherein the base transceiver station and the mobile unit implement High Data Rate (HDR) wireless communications protocols(col 2 lines 13-21), as in claim 27

A base transceiver station comprising: means for determining whether a mobile unit has requested to receive communications froth the base transceiver station(MS requests that the active serving base station be altered in favor of a new serving base station based on quality of transmission, col 10 lines 24-28), wherein the base transceiver station is a member of a group associated with the mobile unit(active set –group- of serving BTS, col 11 line 17); means for receiving a packet and means for, if the mobile unit has requested to receive communications, communicating information from the packet to the mobile unit (col 2 lines 17-21), as in claim 33; further comprising means for transmitting a pilot signal for reception by the mobile unit (MS monitors strength of pilot signal transmitted by BTS , col 10 lines 17-18), as in claim 34; further comprising means for implementing High Data Rate (HDR) wireless communications protocols(col 2 lines 13-21) , as in claim 35.

Fong did not specifically disclose said method and apparatus including a computer readable medium, neither said packet being a multicast packet, as in claims 17, 25 and 33. However Fong disclosed a mobile unit being provided with a delay period through a broadcast message (col 16 line 46-48).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to that Fong has multicasting capabilities, this with the motivation of obtaining a wireless network that services high data rate forward link transmissions fro mobile stations that actively manages the active set of base stations serving high data rate link transmissions and that in order to have a program o computer controlled process it would have been obvious to a

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person of ordinary skill in the art at the time of the invention that some kind of medium such as a memory or storage means, with the motivation of obtaining a method for configuring a layer or protocol prior to commencement of data communications including an air interface that supports implementations of a variety of functions such as voice communications, and data communications .

Allowable Subject Matter

5. Claims 4-8, 12-16, 20-24, 28-32 and 36-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim. Please also notice objection to claims 6-7, 9-16, 17-24, 25-32 and 40 under 37 CFR 1.75

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US patent No. 6,069,871 (Sharma et al) discloses Traffic allocation and dynamic load balancing in a cellular system.
- US patent No. 6,747,964 (Bender) discloses a Method and apparatus for High data rate transmission.
- US patent No. 6,160,999 (Chheda et al) discloses a Wireless communication system.

- Us patent No. 6,781,999 (Eyuboglu et al) discloses Multicasting in wireless communications in a Radio Access Network.

7. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9306

(for formal communications intended for entry, for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to 220 South 20th Street, Crystal Plaza Two, Lobby, Room 1B03, Arlington, Va 22202 (Customer Window).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Ricardo Pizarro** whose telephone number is (571) 272-3077. The examiner can normally be reached on Monday-Friday from 9:00 AM to 5:30 PM. The fax number for this Group is (703) 872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Kenneth Vanderpuye** on (571) 272-3078.

September 12, 2004

Ricardo M. Pizarro